

REMARKS

Claims 1-47 are pending in this application. In the Office Action dated March 6, 2006, Claim 19 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,619,840 to Rasche *et al.* ("Rasche") in combination with U.S. 6,990,170 to Sugihara *et al.* ("Sugihara"). Claims 1-18 and 20-47 were allowed.

Claim 19 recites an imaging apparatus that comprises a generally O-shaped gantry having a radiation source and a detector operable to obtain images of an object positioned inside the gantry; a support structure; a gantry positioning apparatus that secures the gantry to the support structure in a cantilevered manner, the positioning apparatus translating the gantry to multiple positions in a direction that is substantially parallel to the central axis of the gantry; and a processor which receives imaging data from the detector obtained at multiple gantry positions, and combines the data to extend the field of view of the imaging system in the direction of gantry translation.

Applicants respectfully submit that Claim 19 is patentable over the references cited in the latest Office Action, and that Claim 19 should be allowed. The Rasche reference fails to teach a number of claim limitations, including the limitation of a "positioning apparatus translating the gantry to multiple positions in a direction that is substantially parallel to the central axis of the gantry," as well as the limitation of a "processor which receives imaging data obtained at multiple gantry positions, and combines the data to extend the field of view . . . in the direction of gantry translation."

The Sugihara reference relates to a helical scan CT device, which would be understood as a relatively large and cumbersome imaging device that is usable for three-dimensional computerized tomography object reconstructions. Sugihara does not teach or suggest a "gantry positioning apparatus" that secures the gantry to the support structure in a cantilevered manner, and also translates the gantry in a direction that is substantially parallel to the central axis of the gantry. Although Sugihara discusses the relative movement of the gantry with respect to the patient, the embodiments described in the patent involve moving the patient table while the x-ray source and detector remain stationary. Even if one were to attempt to translate Sugihara's CT gantry, there is clearly no teaching or suggestion to utilize a positioning apparatus that both

-3-

secures the gantry to its support in a cantilevered manner, and translates the gantry relative to its support, as is recited in Claim 19. This would require a substantial re-imaging and re-design of the helical CT scanner described in Sugihara. Such a modification would generally be understood as adding needless complexity and instability to the helical CT scanner.

Furthermore, even if one were to combine Sugihara's CT scanner with the Rasche reference, the combination still would not teach or suggest a positioning apparatus that secures an O-shaped to the support structure in a cantilevered manner, and also translates the gantry in a direction that is substantially parallel to the central axis of the gantry.

Accordingly, it is believed that the obviousness rejection of Claim 19 is overcome, and that all claims are allowable.

Information Disclosure Statement

An Information Disclosure Statement (IDS) was filed on June 13, 2006. Entry of the IDS is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By Kevin T. Shaughnessy  
Kevin T. Shaughnessy  
Registration No. 51,014  
Telephone: (978) 341-0036  
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 9/6/06